What is claimed is:

1. An image processing system comprising:

an image displaying apparatus which displays an image;

an imaging taking apparatus to take the image displayed in the image displaying apparatus;

an optical characteristic changing apparatus, provided between the image taking apparatus and the image displaying apparatus, which changes optical characteristics of the displayed image;

a lightpath changing apparatus which changes a lightpath of the displayed image; and

an image processor which receives a plurality of images having respective changed lightpaths from the image taking apparatus and generates a processed image with a moiré removed by correcting or superposing the plurality of the images.

2. The image processing system according to claim 1, further comprising:

a position controller which controls the lightpath changing apparatus to change the lightpaths of the respective images.

3. The image processing system according to claim 2, wherein:

the position controller moves the image displaying apparatus to a plurality of predetermined positions,

the image taking apparatus takes an image of the displayed image at each of the plurality of the predetermined positions, and

the image processor generates the processed image with the moiré removed by correcting or superposing the plurality of the images taken by the image taking apparatus at the plurality of predetermined positions.

4. The image processing system according to claim 2, wherein:

the position controller moves the optical characteristic changing apparatus, the image taking apparatus and the lightpath changing apparatus to a plurality of predetermined positions,

the image taking apparatus takes an image at each of the plurality of the predetermined positions, and

the image processor generates the processed image with the moiré removed by correcting or superposing the plurality of the images taken by the image taking apparatus at the plurality of predetermined positions.

5. The image processing system according to claim 1, wherein the lightpath changing apparatus operates in a manner of one of galvanometer mirror and a prism.

6. The image processing system according to claim 2, wherein the lightpath changing apparatus operates in a manner of one of a galvanometer mirror and a prism.

7. The image processing system according to claim 1, wherein the image processor generates an image processed with the moiré removed by correcting a shape or a brightness of each image.

8. The image processing system according to claim 2, wherein the image processor generates an image processed, with the moiré removed by correcting a shape or a brightness of each image.

9. The image processing system according to claim 3, wherein the image processor generates an image processed with the moiré removed by correcting a shape or a brightness of each image.

10. The image processing system according to claim 4, wherein the image processor generates an image processed with the moiré removed by correcting a shape or a brightness of each image.

11. A method of processing an image in an image processing system having an image displaying apparatus to display an image of an object, an image taking apparatus to take the image from the image displaying apparatus, an optical characteristic changing apparatus provided between the image displaying apparatus and the image taking apparatus which changes an optical characteristic of a taken image, and a lightpath changing apparatus which changes a lightpath of the image displayed in the image displaying apparatus and transports the image to the image taking apparatus, the method comprising:

taking respective images from the image displaying apparatus at a plurality of respective image taking positions;

correcting the respective taken images; and

generating a processed image in which a moiré is reduced by superposing the corrected images on one another.

12. The method according to claim 11, wherein the taking of the images comprises:

moving to the respective image taking position by changing a lightpath of the displayed image; and

taking the respective images from the image displaying apparatus at the respective image taking positions according to the changed lightpath.

13. The method according to claim 11, wherein the moving to the respective image taking positions comprises:

moving the image displaying apparatus or the image taking apparatus to a predetermined position; and

changing the lightpath of the image displayed in the image displaying apparatus at the predetermined position.

14. The method according to claim 11, wherein the correcting of the respective taken images comprises:

correcting a shape or a brightness of the respective images.

15. The method according to claim 12, wherein the correcting of the respective taken images comprises correcting a shape or a brightness of the respective images.

16. The method according to claim 13, wherein the correcting of the respective taken images comprises:

correcting a shape or a brightness of the respective images.

17. A method of reducing a moiré in an image taken of an image displayed on a display apparatus, the method comprising;

taking a first image of the displayed image from a first position;

taking a second image of the displayed image from a second position; and

superposing the first and second images to generate a processed image.

18. The method of claim 17, further comprising:

adjusting an aspect ratio of one of the first and second images prior to superposing the first and second images.

19. The method of claim 17, further comprising:

adjusting a brightness of one of the first and second images prior to superposing the first and second images.

20. The method of claim 17, further comprising:

taking an additional image from an additional position and superposing the additional image with the first and second images to generated the processed image.

21. The method of claim 20, further comprising:

repeating the taking and the superposing of the images for a predetermined number of times.

22. The method of claim 17, further comprising:

taking a plurality of additional images from a respective plurality of different positions and sequentially superposing each additional image on a processed image comprising previously superposed images.

23. A method of reducing a moiré in an image taken of an image displayed on a display apparatus, the method comprising;

taking a plurality of images of the displayed image from a respective plurality of different positions;

adjusting at least one of a size and a brightness of at least one of the plurality of images; and

superposing at least two of the images to generate a processed image having a minimized moiré.

24. An apparatus for producing an image of an image displayed on an image displaying device at a predetermined frequency, the apparatus comprising:

a camera which takes a plurality images of the displayed image,

a motion control system which:

controls a relative position of the camera with respect to the image displaying apparatus, and

sequentially adjusts the relative position so that each of the plurality of images is taken at a different position; and

an image processor which:

adjusts each of the taken images to a predetermined size and brightness, and

superposes the adjusted images to generate a resultant image having a minimum moiré.

25. The apparatus of claim 24, further comprising:

an optical scanner which transfers the displayed image to the camera.